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Claim 10 has been amended as suggested by the Examiner (see page 2 of the
Office Action).

Claim 1 stands rejected under 35 U.S.C. Section 103(a) as being allegedly
unpatentable over Utsugi (US 5,858,562) in view of Takashi (JP 4-297076). This Section
103(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 as amended requires "the electron injection restraining layer and the light
emitting layer are constituted by materials meeting the following formula
$|Ea^{(A)}| > |Ea^{(EBL)}|$ and $|Ea^{(EM)}| > |Ea^{(EBL)}|$ wherein $Ea^{(A)}$ represents the electron affinity of
the acceptor, $Ea^{(EBL)}$ represents the electron affinity of a material of the electron injection
restraining layer, and $Ea^{(EM)}$ represents the electron affinity of a material of the light
emitting layer." This equation enables unexpected results to be achieved. For example,
the instant application at page 48, lines 3-6, explains that a comparison of Example 4
with other examples shows that the aforesaid equation surprisingly enables light emission
efficiency to be improved. The importance and rationale behind this equation are also
discussed in the instant specification from page 10, line 16, through page 11, line 20.
Neither this equation, nor the surprising results associated therewith, are disclosed or
suggested by the cited art.

Both Utsugi and Takashi fail to disclose or suggest the equation required by claim
1. The unexpected results associated therewith are also not disclosed or suggested. Thus,
even if the references were combined (which applicant believes would be incorrect in any
event), the invention of claim 1 still would not be met. It is respectfully requested that
the rejection be withdrawn.

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New claim 19 requires "the hole injection restraining layer and the light emitting layer comprise materials meeting the following formula: $|Ip^{(D)}| \leq |Ip^{(HBL)}|$ and $|Ip^{(EM)}| \leq |Ip^{(HBL)}|$ where $Ip^{(D)}$ represents the ionization potential of a donor, $Ip^{(HBL)}$ represents the ionization potential of a material of the hole injection restraining layer, and $Ip^{(EM)}$ represents the ionization potential of a material of the light emitting layer." The importance of this formula is discussed, for example and without limitation, in the instant specification from page 14, line 7, through page 15, line 10. Both Utsugi and Takashi _fail_ to disclose or suggest the equation required by claim 19. Thus, even if the references were combined (which applicant believes would be incorrect in any event), the invention of claim 19 still would not be met.

New claim 18 requires both the formula of claim 1 and that of claim 19. Claim 18 is clearly patentable for the reasons discussed above.

New claims 12 and 14 call for layers stacks not disclosed or suggested by the art of record.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn and the application passed to issue. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning at page 21, line 7:

The organic EL element of Fig. 2 comprises an anode 2 formed on a transparent

substrate 1, a hole transporting layer [2]3 containing at least a hole transporting material

13 and an acceptor 23, an electron injection restraining layer 4, a light emitting layer 5,

and a cathode 8. In this case, each of the hole transporting layers 3 and 31, the electron

injection restraining layer 4, and the light emitting layer 5 may be a single layer or

multilayers.

IN THE CLAIMS

1. (Amended) An organic electroluminescent element comprising at least a light

emitting layer containing an organic light emitting material placed between an anode and

a cathode, wherein the element [has,] comprises:

(i) between the anode and the light emitting layer, at least a hole transporting layer

containing a hole transporting material and an acceptor, and an electron injection

restraining layer restraining the injection of electrons from the light emitting layer into

the hole transporting layer, from the anode side, and/or[,] (ii) between the light emitting

layer and the cathode, at least an electron transporting layer containing an electron

transporting material and a donor, and a hole injection restraining layer restraining the

injection of holes from the light emitting layer into the electron transporting layer, from

the cathode side[.]; and

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wherein the electron injection restraining layer and the light emitting layer are

constituted by materials meeting the following formula

$$|Ea^{(A)}| > |Ea^{(EBL)}| \text{ and } |Ea^{(EM)}| > |Ea^{(EBL)}|$$

wherein $Ea^{(A)}$ represents the electron affinity of the acceptor, $Ea^{(EBL)}$ represents the

electron affinity of a material of the electron injection restraining layer, and $Ea^{(EM)}$

represents the electron affinity of a material of the light emitting layer.

10. (Amended) An organic electroluminescent element according to claim 1

wherein the organic electroluminescent element [are] arrangement is selected from at

least one of the following[constitutions]:

(1) anode/hole transporting layer/electron injection restraining layer/light emitting

layer/cathode,

(2) anode/hole transporting layer/electron injection restraining layer/light emitting

layer/electron transporting layer/cathode,

(3) anode/light emitting layer/hole injection restraining layer/electron transporting

layer/cathode,

(4) anode/hole transporting layer/light emitting layer/hole injection restraining

layer/electron transporting layer/cathode, [and] or

(5) anode/hole transporting layer/electron injection restraining layer/light emitting

layer/hole injection restraining layer/electron transporting layer/cathode.

Please add the following new claims:

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12. (New) An organic electroluminescent element comprising:

a substrate supporting, proceeding from the substrate outwardly,

an anode;

a hole transporting layer;

an electron injection restraining layer;

a light emitting layer;

a hole injection restraining layer;

an electron transporting layer including an electron transporting material

and an inorganic donor; and

a cathode;

wherein the hole injection restraining layer restrains injection of holes from

the light emitting layer into the electron transporting layer.

13. (New) The element of claim 12, wherein the hole injection restraining layer

comprises one of: N,N' – di(naphthylene-1-yl) – N, N' – bidiphenyl – benzidine; N, N' –

bis – (3-methylphenyl)-N,N'-bis-(phenyl)-benzidine; a quinacridone base compound; a

phthalocyanine base compound; polyvinyl carbazole; poly-p-phenylenevinylene; or

polysilane.

14. (New) An organic electroluminescent element comprising:

a substrate supporting, proceeding from the substrate outwardly,

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an anode;

a light emitting layer;

a hole injection restraining layer;

an electron transporting layer including an electron transporting material

and an inorganic donor; and

a cathode;

wherein the hole injection restraining layer restrains injection of holes from

the light emitting layer into the electron transporting layer.

15. (New) The element of claim 14, wherein the hole injection restraining layer

comprises one of: N,N' – di(naphthylene-l-yl) – N, N' – bidiphenyl – benzidine; N, N' –

bis – (3-methylphenyl)-N,N'-bis-(phenyl)-benzidine; a quinacridone base compound; a

phthalocyanine base compound; polyvinyl carbazole; poly-p-phenylenevinylene; or

polysilane.

16. (New) The element of claim 14, further comprising a hole transporting layer

between the anode and the light emitting layer.

17. (New) The element of claim 1, wherein the electron injection restraining layer

or hole injection restraining layer comprises one of: N,N' – di(naphthylene-l-yl) – N, N' –

bidiphenyl – benzidine; N, N' – bis – (3-methylphenyl)-N,N'-bis-(phenyl)-benzidine; a

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quinacridone base compound; a phthalocyanine base compound; polyvinyl carbazole; poly-p-phenylenevinylene; and polysilane.

18. (New) An organic electroluminescent element comprising at least a light emitting layer containing an organic light emitting material placed between an anode and a cathode, wherein the element comprises:

(i) between the anode and the light emitting layer, at least a hole transporting layer containing a hole transporting material and an acceptor, and an electron injection restraining layer restraining the injection of electrons from the light emitting layer into the hole transporting layer, from the anode side, and/or (ii) between the light emitting layer and the cathode, at least an electron transporting layer containing an electron transporting material and a donor, and a hole injection restraining layer restraining the injection of holes from the light emitting layer into the electron transporting layer, from the cathode side;

wherein the electron injection restraining layer and the light emitting layer are constituted by materials meeting the following formula

$$| \quad Ea^{(A)}| \geq |Ea^{(EBL)}| \text{ and } |Ea^{(EM)}| \geq |Ea^{(EBL)}|$$

wherein $Ea^{(A)}$ represents the electron affinity of the acceptor, $Ea^{(EBL)}$ represents the electron affinity of a material of the electron injection restraining layer, and $Ea^{(EM)}$ represents the electron affinity of a material of the light emitting layer; and

wherein the hole injection restraining layer and the light emitting layer comprise materials meeting the following formula:

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$$|Ip^{(D)}| \le |Ip^{(HBL)}| \text{ and } |Ip^{(EM)}| \le |Ip^{(HBL)}|$$

where $Ip^{(D)}$ represents the ionization potential of a donor, $Ip^{(HBL)}$ represents the ionization potential of a material of the hole injection restraining layer, and $Ip^{(EM)}$ represents the ionization potential of a material of the light emitting layer.

19. (New) An organic electroluminescent element comprising at least a light emitting layer containing an organic light emitting material placed between an anode and a cathode, wherein the element comprises:

(i) between the anode and the light emitting layer, at least a hole transporting layer containing a hole transporting material and an acceptor, and an electron injection restraining layer restraining the injection of electrons from the light emitting layer into the hole transporting layer, from the anode side, and/or (ii) between the light emitting layer and the cathode, at least an electron transporting layer containing an electron transporting material and a donor, and a hole injection restraining layer restraining the injection of holes from the light emitting layer into the electron transporting layer, from the cathode side;

wherein the hole injection restraining layer and the light emitting layer comprise materials meeting the following formula:

$$|Ip^{(D)}| \le |Ip^{(HBL)}| \text{ and } |Ip^{(EM)}| \le |Ip^{(HBL)}|$$

where $Ip^{(D)}$ represents the ionization potential of a donor, $Ip^{(HBL)}$ represents the ionization potential of a material of the hole injection restraining layer, and $Ip^{(EM)}$ represents the ionization potential of a material of the light emitting layer.

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